**RULES**
**OF**
**THE TENNESSEE DEPARTMENT OF SAFETY**
**DRIVER CONTROL DIVISION**

# CHAPTER 1340-3-3
# RULES AND REGULATIONS FOR SCHOOL BUS INSPECTION PROCEDURES

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**1340-3-3-.01 PURPOSE.** To establish a uniform procedure for inspecting school buses and promoting school bus safety.

***Authority:*** *T.C.A. §§49-6-2102, 49-6-2109, and 4-4-102; Executive Order 45 (Feb. 11, 1983).* ***Administrative History:*** *Original rule filed July 20, 1989; effective October 29, 1989.*

**1340-3-3-.02 DEFINITIONS.** Reserved.

**1340-3-3-.03 POLICIES FOR SCHOOL BUS INSPECTIONS.**

(1) ANNUAL SCHOOL BUS INSPECTIONS (CLASS 1)

(a) School bus inspections will be conducted by a qualified inspector. (This inspector will have completed the training program provided by the department prior to conducting inspections.)

(b) The school bus inspector will be responsible for ensuring that all vehicles designed for use in the school system used for the transportation of students to and from school and school-related activities will meet the requirements as identified in the minimum specifications for school buses.

(c) Requests for inspections will be coordinated through Headquarters Pupil Transportation Safety.

(d) Request for inspections (e.q., those vehicles that have been repowered, rebuilt, or have received a major modification) will be coordinated through the Supervisor of Pupil Transportation Safety.

(e) Placing a vehicle out-of-service will be the responsibility of the inspector.

(f) The inspector shall be required to explain the reasons for noncompliance with the specifications to the Transportation Director and/or Superintendent of schools.

(g) Upon approval of and/or noncompliance of the bus(s), the inspector shall:

1. Complete the School Bus Inspection Report (SF-0722) in its entirety, making sure that all boxes are checked and -that any and all notations relating to the condition of the bus are properly noted.

2. If any item is found to be unsatisfactory, the inspector will mark the appropriate box with either a check or an X.

(Rule 1340-3-3-.03, continued)

3. When it has been determined by the inspector that those items marked unsatisfactory have been corrected to meet specifications, the inspector will:

   Circle the check mark or X;

   Place his/her initials alongside the appropriate box, along with the date the unsatisfactory item has been approved. (This will serve as an indicator that the item has been reinspected and approved.) Those check marks or x's that have not been circled and dated will be cause of nonacceptance of the inspection.

4. The inspector will then sign the inspection report; this will be an indicator to all receiving it that the vehicle recorded thereon has complied with the minimum specifications.

5. Distribution of the inspection report shall be the responsibility of the inspector. This is to be done in the following manner:

   Original - Upon completion of each school system, the original inspection form (SF-0722) shall be presented to Pupil Transportation Safety Headquarters.

   1st Copy - Upon completion of each bus inspected, present the Transportation Director or his designated representative the first copy as a record of completion or to serve notice of deficiencies needing repair/replacement.

   2nd Copy - If the inspection results in an out-of-service bus, this copy serves as a record of reinspection of indicated deficiencies. Present to the Transportation Director or his designated representative.

   3rd Copy - School Bus Inspector's Copy, and shall indicate the inspection history of the bus being inspected.

(h) SPECIAL NOTES: Any time a county/city or private contractor decides to put a new and/or used school bus into service for any reason, that entity must have the bus(s) inspected prior to transporting pupils.

(i) Whenever a bus is wrecked and the damage necessitates that the bus be put out-of-service for any length of time; the bus is considered "Out-of-Service" by the Department of Safety. When the bus is repaired and road worthy, a Class I or 11 inspection must be conducted prior to transporting pupils.

(2) EXTENDED UTILIZATION INSPECTIONS (CLASS II)

(a) All policies of the Annual School Bus Inspections shall apply to Class 11 inspections.

(b) Class 11 inspections shall be conducted on all conventional buses (Class C or modified Class B) beginning the 13th year of service. No class C or modified Class B bus is permitted to transport school pupils past 15 years of service. Dates shall be verified through a Certificate of Title or Titles issued by the Department of Revenue.

1. After 12 years of service, year-to-year approval is required from the Commissioner of Education.

(Rule 1340-3-3-.03, continued)

2. Any bus with over 12 years of use, but not more than 15 years of use shall: be inspected by the Commissioner of Safety or his designated representative at least 2 times annually.

   The initial inspection each year shall be a Class 11 inspection.

   The second and subsequent inspections shall be a Class I or 11 inspection.

   The second inspection shall be conducted no less than 4 months or more than 6 months from the initial inspection.

3. At such inspections, the inspector shall have the authority to require repairs or reconditioning to be made which he considers necessary for the continued safe use and operation of the bus.

   In addition to any other repairs, replacements or reconditioning required by the inspector, the steering, braking and exhaust system of all Class C or modified Class B buses with over 12 years of service shall be thoroughly reconditioned or replaced, as necessary, prior to any continued use.

   All wheels, bearings, drums and races shall be dismantled and thoroughly cleaned and inspected on the initial inspection prior to any continued use.

   If the local authority or owner refuses to take the required actions or if the inspector considers continued use of bus to be unsafe, he shall order its removal from service.

(c) School Bus Inspection Report (SF-0722) shall be completed on all Class Il inspections and distribution made in accordance with report procedure of Class I inspections.

(3) RANDOM SPOT CHECK INSPECTIONS (CLASS III)

(a) All policies of the Annual School Bus Inspections (Class 1) shall apply to Class III inspections.

(b) Class III inspections shall be conducted at the discretion of the School Bus Inspectors in order to determine whether the buses can be used safely to ‘protect properly the lives of school pupils.

1. Class III inspections shall be conducted on buses that have annual inspections performed during the same school year.

2. Dates and times for the Class III inspections shall not be announced.

3. School Bus Inspectors shall determine dates and times so as not to interfere with normal operations of the school system being inspected.

4. A minimum of 10% of the systems vehicles shall be inspected.

(c) School Bus Inspection Report (SF-0722) shall be completed on all Class III inspections and distribution made in accordance with report procedures of Class I inspections.

(4) COMPLIMENTARY INSPECTION (CLASS IV)

(a) All policies of the Annual School Bus Inspections (CLASS I) SHALL apply to Class IV inspections.

(Rule 1340-3-3-.03, continued)

(b) Class IV inspections are those inspections which have been requested by private school bus owner entities.

(c) The purpose of CLASS IV inspections is to provide guidance to those entities in terms of safe transportation to their passengers.

(d) Class IV inspections are not subject to Inspection Sticker procedures, and under no circumstances are the stickers to be affixed to said buses.

(e) Scheduling of Class IV inspections shall be at the discretion of the School Bus Inspector.

(f) School Bus Inspection Report (SF-0722) shall be completed on each Class IV inspection and distribution of copies as follows:

1. Original - Headquarters Pupil Transportation Safety

2. 1st Copy - Owner of the bus inspected

3. 2nd Copy - Discard

4. 3rd Copy - School Bus Inspector.

(5) During the inspection process, inspectors will permit on-the-spot repairs to be made by school officials if they do not interfere with the ongoing inspection.

(a) Every effort should be made to correct those deficiencies prior to inspection, during inspection and post inspection periods to reduce follow-up inspections.

***Authority:*** *T.C.A. §§49-6-2102, 49-6-2109, and 4-4-102; Executive Order 45 (February 11, 1983).* ***Administrative History:*** *Original rule filed July 20, 1989; effective October 29, 1989.*

**1340-3-3-.04 POLICY FOR SCHOOL BUS INSPECTION STICKERS.**

(1) SCHOOL BUS INSPECTION STICKER POLICY

(a) The School Bus Inspection Sticker is a system of identification enabling responsible officials and law enforcement personnel to visually identify the inspection status of school buses transporting pupils.

(b) School Bus Inspection Stickers will consist of 3 different and easily recognizable window decals.

1. One of the 3 stickers will be affixed to the lower left-hand inside corner of the bus windshield upon completion of the inspection.

2. Pupil Transportation Safety personnel are the only ones with the authority to affix or remove inspection stickers.

3. The inspection sticker will rotate colors yearly; either yellow on black or black on yellow.

(c) School Bus Inspection Sticker No. I

(Rule 1340-3-3-.04, continued)

1. Department of Safety certification indicating the current school year upon silhouette of the State of Tennessee.

2. Affixed to those buses that were found in satisfactory condition being deficient-free at the initial inspection, having no written discrepancies requiring follow-up action.

(d) School Bus Inspection Sticker No. 2

1. Department of Safety certification indicating the current school year upon silhouette of the State of Tennessee.

2. Affixed to those buses that were found in need of minor repairs but not considered an immediate threat to the safety of students, but MUST be corrected before final approval may be given.

School officials shall be given a reasonable period of time to correct deficiencies.

A mutual time shall be decided upon by the school official and inspector for the follow-up inspection, not to exceed 30 days from the date of the initial inspection.

After completion of the follow-up inspection and providing all identified deficiencies have been corrected, the inspector shall remove the No. 2 sticker and affix a No. I sticker in its place.

If the identified deficiencies have not been corrected, the inspector shall remove the No. 2 sticker and affix a No. 3 (Out-of-Service) sticker in its place.

Subsequent follow-up inspection shall be decided upon between the school officials and inspector. Once all identified deficiencies have been corrected, the No. 3 sticker will be replaced by a No. 1.

(e) School Bus Inspection Sticker No. 3

1. Department of Safety Certification declaring “the vehicle is not to be used for transporting of students to and from school until removal of this notice by the State Safety Inspector.” The international prohibition sign is super-imposed over the word “STUDENTS”.

When it has been determined by the school bus inspector that a bus fails to meet the criteria as outlined in this manual that vehicle will be considered out-of-service.

When this determination has been made the inspector will affix a No. 3 sticker in the appropriate location.

When the noted deficiencies have been corrected, the inspector shall remove sticker No. 3 and affix a No. I in its place.

***Authority:*** *T.C.A. §§49-6-2102, 49-6-2109, and 4-4-102, Executive Order 45 (February 11, 1983).* ***Administrative History:*** *Original rule filed July 20, 1989; effective October 29, 1989.*

**1340-3-3-.05 PROCEDURES FOR SCHOOL BUS INSPECTIONS.**

(Rule 1340-3-3-.05, continued)

CLASS I, II & IV INSPECTION PROCEDURES

(1) The following information should be recorded on the School Bus Inspection Report (SF-0722):

(a) County in which the vehicle primarily operates
(b) Date of inspection
(c) Special Chauffeur's /Code 27 Driver License Number
(d) Date of birth
(e) Owner of bus
(f) Driver of bus
(g) Driver's years of service
(h) Driver's age
(i) Bus Number
(j) License number
(k) Seating arrangement
(1) Make of chassis
(m) Model
(n) Make of body
(o) Mileage
(p) Wheel base
(q) Years in service
(r) Type school bus

(2) The following equipment should be checked to see that it meets the State of Tennessee Minimum Standards of the Board of Education at Rule 0520-1-5.

(a) Fire extinguisher - fully charged

(b) First Aid kit - for proper contents

(c) Highway warning kit

(d) All required instruments, and ensure that they are working properly.

(e) Horn

(f) Driver's seat belt/retractors

(g) Sun visors 16" x 30"

(h) Mirrors, rearview 6" x 30"

(i) Permit holders

(j) All interior lights

(k) Heaters /defrosters

(1) Fans

(m) Eight-light warning system - in checking the light system, proceed as follows:

1. Advise the driver to start the engine.

2. Make sure the service door is closed.

3. Make sure that all warning switches are in the off position.

4. Start amber lights with service door closed.

5. Instruct the driver to open the service door (RED LIGHTS AND STOP SIGNAL ARM ARE OPERABLE).

6. Have the driver put the stop signal area in (RED LIGHTS MUST CANCEL).

7. Red indicator light in driver's compartment should indicate when red lights are flashing (THIS WILL BE OBSERVED WHEN YOU ARE IN THE DRIVER'S COMPARTMENT).

8. Have the driver turn the master switch "on", if so equipped.

9. Turn sequencing switch on (AMBER LIGHTS MUST FLASH).

10. Put stop signal arm out (AMBER LIGHTS MUST CANCEL AND RED LIGHTS MUST FLASH).

11. Put stop signal arm in (RED LIGHTS MUST CANCEL).

12. Amber and red indicator lights in the driver's compartment should indicate when amber and red lights are flashing.

13. Turn sequencing switch on (AMBER LIGHTS MUST FLASH).

14. Open the service door (AMBER LIGHTS MUST CANCEL AND RED LIGHTS MUST FLASH).

15. Close service door (RED LIGHTS MUST CANCEL).

16. Open service door (IF RED LIGHTS ARE NOT AUTOMATICALLY CANCELLED AND START TO FLASH, TURN OFF MASTER SWITCH. RED LIGHTS MUST CANCEL).

NOTE: DURING OPERATION, BOTH AMBER AND RED LIGHTS MUST FLASH AT A RATE 60 TO 120 TIMES PER MINUTE, AND SHOULD REACH FULL BRILLIANCE DURING EACH CYCLE.

(n) Light monitor system, if equipped

(o) Emergency door(s)/window for:

1. Warning buzzer

2. Check vandal locks (ignition bypass prohibited)

3. Emergency Door(s)/window(s) markings

(Rule 1340-3-3-.05, continued)

4. Emergency door handle guard

5. Ease of opening (using your off hand)

6. Ledge at bottom of door

7. Meeting FMVSS 217 requirements

(3) Interior

(a) Check the following in the interior:

1. Sharp edges

2. Loose molding

3. Loose or raised floorcovering

4. Protrusions or protuberances

(4) Exterior

(a) Check the entire exterior for:

1. Sharp edges or protuberances

2. Required and specified lettering

3. Anti-hitch bumper shield

(5) The inspector is to advise the driver that the inspector is about to start the mechanical part of the inspection. The inspector is to request the following of the driver:

(a) Ask the driver to set the parking brake on the vehicle.

(b) Ask the driver to start the engine and fully charge the air system.

(c) Ask the driver to turn the engine off.

(6) Front of the bus.

The inspector is to take up a position in front of the vehicle, making sure that he has a visual contact with the driver at all times, and inspect the following:

(a) The eight-light system lamps and stop sign lamps for operation from the outside of the bus.
(b) Headlights (high and low beam)
(c) Turn signals - 6” cowl mounted
(d) Four-way flashers
(e) I.D. lights
(f) Clearance lights
(g) Windshield wipers and washers (variable speed, 2 motors)
(h) Windshield
(i) Auxiliary driving lights

(Rule 1340-3-3-.05, continued)

(j) Front bumper and tow hooks

(7) The front-mounted engine compartment should be inspected for the following:

(a) Fuel leaks
(b) Oil leaks
(c) Coolant leaks
(d) Loose or worn belts
(e) Wiring
(f) Hydraulic brake master cylinder fluid level
(g) Power steering fluid leaks and reservoir level
(h) Firewall for holes

(8) The left side of the bus should be inspected for the following:

(a) Stop sign, making sure it is properly painted.

(b) The stop signal arm - make sure it will lock in both the open and closed position.

(c) For mid-engine bus, the engine compartment as in Item 7. NOTE: If equipped with an ignition shut-off switch, turn off until you are clear of the engine compartment. (d) While moving toward the rear of the bus, the exterior for:

1. Indicators of rusting metal

2. Loose rivets

3. Loose bolts

4. Loose metal

5. Rub rails

6. All side glass

(e) Fuel filler cap

(f) Side emergency door, if equipped

(g) All side lights and turn signals

(h) Tires and wheels, for the following conditions:

1. Front tire(s) of less than 4/32 inch tread depth (recapped tires are not allowed on the front axle)

2. Rear tire(s) worn so that less than 2/32 inch tread depth remains in any two major grooves measured at three locations spaced approximately equal around the outside of the tire.

3. Tires worn so that the tread wear indicators contact the roadway.

4. Any tire that has a worn spot, exposing the cord through the tread.

5. Any tire that has been regrooved or recut.

6. Any tire sidewall for damaged body cords.

7. Any tire for visible bumps, bulges or knots indicating partial failure or separation of the tire structure.

8. Any tire that is marked for other than “highway use”.

9. Valve stem(s) for cracks, damage, or evidence of wearing.

10. Flat tires

11. Check for proper size tires/type of wheels and proper number of lug nuts.

(9) The rear of the bus. Inspect the following:

(a) Alternating lights

(b) Clearance and I.D. lights

(c) Left and right turn signals

(d) Four-way flashers

(e) Stop lights

(f) Tail lights and backup lights

(g) Tail pipe extension (not more than 1/4 “ beyond the rear bumper or more than V2 “ below the bumper)

(h) Rear emergency exit

1. Check for ease of opening (using your off hand).

2. No apparatus may be present that would lock or prohibit the emergency door from opening, other than a manufacturer’s vandal lock system.

(i) Handholds, footholds

(j) Loose rivets, bolts, or damaged metal

(k) Rear license plate holder and light

(l) Rear engine-powered bus, check the engine compartment as in Item # 7

NOTE: If equipped with an ignition shut-off switch, turn off until clear of the compartment.

(m) Rear bumper and tow hooks

(10) The right side of the bus should be inspected for the following:

(Rule 1340-3-3-.05, continued)

(a) Tires, wheels, and lugs, as in Item #8/h. (1) through (11).

(b) Side lights and turn signals

(c) Fuel filler cap

(d) Service door for (24" x 68"):

1. Opening and closing

2. Wearing of hinges

3. Broken or cracked glass

4. Emergency release

5. Flexible protective material around door edges

(e) Rub rails

(f) Mirrors

(11) Front end assembly - inspect the following:

(Vehicle must be jacked up with wheels straight forward)

(a) King pins - Check for excessive play by use of a pry bar placed at the bottom of the wheel (make sure the valve stem is not present in that location), place free hand at the top of the tire. One-quarter inch in/out movement at tire circumference is maximum. Tires should be spun to check for rough bearings, excessive drag, wheel is not bent, and that lateral and radial run-out of each rim head area does not exceed 1/8 inch. Apply brakes to differentiate between king pin and wheel bearing movement.

(b) Wheel bearings - Check by placing one foot at the bottom of the tire. Place both hands at the top inside edge of tire. Pull with your hands and push with your foot.

(12) Under Chassis

Inspect the following items with weight on wheels, and engine running if equipped with power steering:

(a) Tie rod ends and drag links - Check for excessive play. Have the driver rock the steering wheel back and forth sharply, so as to mive the steering components. Freeplay in the linkage shall not exceed .030 inch at any one location for any one component.

(b) Turn stops - This may be done visually by looking for shiny spots and/or signs of wear on the side of the tires, drag links, shocks, brake lines.

(c) Check for loose steering box where it is bolted to the frame while the drive is rocking the steering wheel back and forth, and you are performing Item #12/a.

(Rule 1340-3-3-.05, continued)

(d) Check for excessive play in the steering box (sector shaft movement as compared to pitman arm movement).

(e) Measure for steering wheel lash:

| Steering Wheel Diameter | Maximum Lash |
|---|---|
| 16” wheel or less | 2” |
| 18” wheel | 2 1/1 |
| 20” wheel | 2 1/2 |
| 22” wheel | 2 3/4 |

(f) Shock absorbers - All Buses shall be equipped with front and rear double-acting shock absorbers. Check for loose, cracked or broken mountings, missing grommets, and for leaking shock absorbers.

(g) Brake/air chambers - Check all visible air lines and hoses for leaks, rubbing, loose connections, and cracks. Have the driver apply the brakes and check while under pressure. Check the operation of air brakes, diaphrarn leaks, and condition of the linkage. Check for service air leaks with the spring brake off. Flex rubber lines for evidence of breaks or cracks. Check to make sure that brake hoses are not mounted so as to contact the vehicle body or chassis.

(h) Slack adjusters/push rod travel - Check the slack adjusters when service brake is applied to ensure that the slack angle is not less than 80 degrees nor more than 105 degrees, and the push rod travel does not exceed manufacturer’s specifications.

(i) Lining - Check to see that the lining is not cracked or broken, and that these cracks/breaks do not extend into the rivet holes. Linings shall be securely attached to the brake shoes.

(j) Leaks, fluid - Check area under engine of conventional buses for leaks (water, fuel, oil). Check for leaks around the power steering unit and brake cylinder.

(k) Front springs - Check spring handers, spring leaves, and shackles for wear, looseness, extruded or missing grommets, loose U-bolts, broken leaves.

(1) Spring leaf clamps - Should be one located at each end of the stack. Check for presence, cracks, looseness, and tie bolt.

(m) Spring stack alignment - Leaves should not extend beyond a horizontal line parallel to the center line of the stack which is measured from the outside of the U-bolts.

(n) Brake assemblies - Check for cracks or deformities.

(o) Engine mounts - Check engine mounting brackets and bolts for breaks or looseness.

(p) Exhaust system:

1. Check the entire system from engine to end of the tail pipe for leaks and damage, with engine at idle and the exhaust system unrestricted.

2. Check to see that the entire system is properly supported.

(Rule 1340-3-3-.05, continued)

3. Tail pipe must extend to, but not more than 1/4 inch beyond the rear bumper, nor more than 1/2 inch below the rear bumper; not more than 1/2 inch beyond body if left side exhaust.

4. The exhaust system shall be properly insulated from the fuel tank and fuel tank connections by a securely attached metal shield at any point where it is 12 inches or less from the tank or fuel tank connections.

5. The size of the tail pipe shall not be reduced after it leaves the muffler.

(q) Drive line loops - Check for compliance with current minimum specifications.

(r) U-joints - Check for looseness by moving the driveline up and down; also by twisting the driveline from both sides of the U-joint.

(s) Fuel tank - Check for secure mounting, leaks, fuel lines, filler cap, and proper mounting.

(t) Wiring - Check the following:

1. Any loose, broken, or frayed wires.

2. That wiring is properly secured to the frame and not hanging down

3. Grommets and proper protection against chafing.

(u) Differential - Check for leaks at differential, pinion seal, and both rear wheel seals.

(v) Rear shock absorbers - Check in same manner as the front shock absorbers.

(w) Rear springs - Check rear springs in the same manner as the front springs.

(x) Rear brake lines - Check in the same manner as front brake lines.

(y) Rear/midship mount engines - Check for fluid leaks, loose engine mounts, and exhaust system the same as for the front-mounted engine.

(z) Body clamps - Check body clamps at upper frame rail for missing or loose clamps.

(aa) Frame:

1. Check the frame and cross members the entire length of the bus for cracks, brakes, loose bolts and loose rivets.

2. Check spring hanger supports for loose or missing rivets or bolts and cracks in the frame at these locations.

(bb) Transmission - Record type and model number, if appropriate, on inspection form.

(13) Air System

(a) Open drain valves on all air tanks to check for contaminants.

(Rule 1340-3-3-.05, continued)

(b) Check for wet tank drain release on outside of bus or in driver's compartment. (Automatic ejection valves do not meet this specification).

(c) Check for presence of air dryer.

(14) Checking the Air Brake System (Pre-Federal Motor Vehicle Safety Standards (FMVSS) #121).

(a) Check the low air indicator with the engine off, key on, and exhaust the air reserve by pumping the brake pedal until the low air warning (either audible or visual) device is activated.

(b) Observe the gauge; when the low air warning device is activated, the gauge shall indicate at least 50% of the air compressor cut-out pressure, not to exceed 50% plus 10 pounds.

(c) Check the auxiliary emergency brake system (buses manufactured 1965 to 1975). The auxiliary emergency brake system should automatically apply at some fixed pressure which shall not be more than 45 psi. To check this setting:

1. Place vehicle in low gear, or block the wheels; put park brake control in drive position.

2. Deplete the air reservoir pressure until the spring brakes automatically apply.

3. Note the reading on the air gauge at the time this occurs.

(d) The auxiliary emergency brake system must have separate air reservoir of sufficient capacity to allow for at least two cycles of release and application of the emergency brakes. To check this:

1. Run the service reservoir down completely by pumping the brake pedal until the air gauge reads ZERO, "0".

2. Check the gauge for operation - should read "0" when air supply is depleted.

3. Start the engine and immediately activate the emergency brake release and move the vehicle.

4. Now apply the emergency brake; the vehicle should stop.

5. Repeat the above cycle.

6. If you are unable to move the vehicle on the second application of theauxiliary emergency brake release, it means the reservoir for that system is not properly protected.

(e) Start the engine, and at a fast idle (not to exceed 1500 RPM's), build up the air supply to maximum reading on the gauge or gauges which indicates compressor cut-out.

1. Pump down the service air pressure, using the brake pedal, until the gauge reads 60 psi. Time the air pressure buildup between 60 psi and 90 psi.

2. Pump down the service air pressure, using service brake pedal, until gauge reads 50 psi. Time air pressure buildup between 50 psi, and 100 psi. Buildup time shall not exceed three minutes.

(Rule 1340-3-3-.05, continued)

(f) While the air reservoir is at maximum pressure, the engine is off and the park brake released, observe the air gauge. Loss must not exceed three pounds in one minute or ten pounds in three minutes with the service brakes applied or unapplied.

(15) Checking the Federal Motor Vehicle Safety Standards (FMVSS) #121 System

(a) Completely deplete the air supply in the wet tank (check for contaminants at this time).

(b) With air reserve at maximum pressure (110- 120 psi), open drain valve on the primary or secondary air supply tank.

(c) Rapidly exhaust the air pressure to approximately 90 psi.

(d) Secure the valve and observe the air pressure gauges (dual air systems require two separate gauges or one gauge with two indicators).

(e) If the gauge corresponding with the air supply system (primary/green or secondary/red) reduces while the other system holds, proceed to opposite system.

(f) Repeat the process until gauges or indicator drops below previous gauge or indicator. (If previous gauge or indicator holds, then check valves in the system are working properly. If both gauges or indicators drop simultaneously, this will indicate a defective check in the valve system).

(g) Start the engine. Build up the air supply to maximum reading on the gauge or gauges which indicate compressor cut-out.

(h) Check the low air indicator with the engine off, and exhaust the air reserve by pumping the service brake pedal until the low air warning device(s), as required, is activated.

(i) Observe the gauge; when the low air warning device is activated, the gauge should indicate approximately 50% of the air compressor cut-out pressure, not to exceed 50% plus pounds.

(j) Pump down the service air pressure, using the brake pedal, until the gauge reads 60 psi. Time the air pressure buildup between 60 psi and 90 psi, engine at fast idle, not to exceed 1500 RPM. Buildup time should not exceed one minute. (If in excess of one minute, proceed to step 11).

(k) Pump down service air pressure using service brake pedal until gauge reads 50 psi. Time air pressure buildup between 50 psi and 100 psi, engine at fast idle, not to exceed 1500 rpm. Buildup time should not exceed three minutes.

(1) Check the spring brake activation by draining each system (primary and secondary) individually with park brake control in “release” or “drive” position, and observe when spring brakes apply. Brakes should apply when air pressure in both systems is depleted to 45 psi or lower.

(16) Parking Brake(s) - Hydraulic or Hand Brake

(a) If the vehicle is equipped with a hand parking or hydraulic spring brake system, instruct the driver to set the brake and then attempt to move the vehicle forward in second gear. The vehicle should not move during moderate acceleration. NOTE: CAUTION SHOULD BE EXECUTED WHEN ATTEMPTING To MOVE THE VEHICLE.

(Rule 1340-3-3-.05, continued)

(17) Completing the Inspection

(a) Review the inspection form to make sure that all items have been checked.

(b) If the vehicle has successfully passed the inspection and all items meet the specifications, place your signature at the bottom of the form. This will serve as a notice to all interested parties that:

1. The inspection has been completed.

2. The defects noted have been repaired.

3. The vehicle is ready for service.

(c) Place inspection decal in windshield.

CLASS II INSPECTION

(19) Due to the nature of Class II inspections, additional inspection items must be included. These items will apply only to Class II inspections.

(a) Dismantle 1. Wheels 2. Drums 3. Bearings 4. Races

(b) Clean entire brake shoe mounting area (backing plate).

(20) Drums

(a) Check the wear on all drums using a drum-mic - 120,000 and larger is a rejected item and must be replaced. Rotors will be checked with a dial-mic.

(21) Brakes

(a) Check brake shoes for ‘ excessive wear, missing parts and broken or cracked shoes.

(b) Check the spindle for cracks, cuts and grooves.

(c) Check hydraulic brake wheel cylinders, springs, star wheels and backing plate.

(4) Bearings and Races

***Authority:*** *T.C.A. §§49-6-2102,49-6-2109, and 4-4-102; Executive Order 45 (February 11, 1983).* ***Administrative History:*** *Original rule filed July 20, 1989; effective October 29, 1989.*

**1340-3-3-.06 CRITERIA FOR REMOVING BUSES FROM SERVICE.**

(1) When one (1) or more of the following items have been found to be unsatisfactory and do not meet the requirements as set forth in these rules or the National School Bus Minimum Standards, it will be cause for placing that vehicle out-of-service until the unsatisfactory items have been repaired or replaced in such a manner that it will meet these requirements. The determination to place the vehicle out-of-service will be made by the School Bus Inspector.

(a) Brakes

(Rule 1340-3-3-.06, continued)

1. Parking brake on hydraulic units will not hold if attempt is made to move the vehicle in second gear.

2. FMVSS 121 - If dual air system fails to maintain integrity when either tank is drained rapidly.

3. One or more brakes which exceed the brake chamber manufacturer's recommended pushrod travel.

4. One or more brakes on air system in which the slack adjuster angle is less than 80 degrees or more than 105 degrees.

5. One or more brakes on air system that is equipped with wedge brakes, which exceed .060 clearance measured between the center of the bottom lining and the drum when service brakes are unapplied.

6. A release system for spring brakes (1974 or older) which is not capable of two releases after the service reservoirs are depleted and spring brakes are set.

7. No more than one quart of contaminants will be allowed in the entire air system. (Water and oil will be considered contaminants.)

8. Air loss which exceeds three pounds per minute or ten pounds in three minutes with the engine off, brakes applied or unapplied, and air system at maximum pressure.

9. On hydraulic/vacuum systems, no more than three inches drop in vacuum in one minute after turning the engine off (brakes applied).

10. A hydro-vacuum system which will not hold pressure with the engine shut off, and brakes applied. (Up to 40% depletion on a single brake application is allowed).

(b) Compressor Build-Up Time

1. 50 to 100 psi, in excess of three minutes at 1500 RPM's.

2. Compressor cut out at less than 85 poundS or more than 130 pounds.

(c) Brake Warning Devices

1. Required low air warning device(s) fails to operate at 50% of the governor cut-off pressure or + pounds.

2. Low air warning device that fails to operate prior to spring brake engagement.

3. Low vacuum warning if less than eight inches of vacuum.

(d) Hydraulic Brakes

1. If the brake pedal, upon first application, travels more than 80% of the distance to the floor (this must be measured).

2. Any brake lines that are kinked or cracked.

(Rule 1340-3-3-.06, continued)

3. Any obvious leak/leaking of brake fluid.

4. Hydraulic fluid level at 50% or less of the master cylinder capacity in any reservoir.

5. A hydraulic system which will not hold pressure with the engine off and brakes applied.

(e) Brake Shoes (Lining)

1. Riveted brake lining less than 1/32-inch thick measured over any rivet head.

2. Bonded brake lining less than 1/32-inch thick.

3. Broken/missing brake lining.

(f) Exhaust System

1. Any exhaust component that has deteriorated to the point of allowing the escape of exhaust gases, while the vehicles' engine is at idle and without restriction to the exhaust system.

2. Any exhaust leak that can be felt with the bare hand six inches from the point of the leak, in any direction, with the engine at idle, and without restriction to the.exhaust system.

3. Missing fuel tank heat shields.

(g) Braking System Components (Drums, Air Chambers, etc.)

1. Brake drums or rotor that are cracked or broken to the extent that such crack or break extends through to the outside of the drum, or extending from side-to-side and through the rotor/padcontact surface.

2. Different size brake chambers appearing on the same axle.

3. Damaged or broken foundation brake components that adversely affect the braking system.

4. Cracked or worn flexible air hose with any visible cord broken.

5. Oil contaminated drums.

(h) Steering Components

1. Any steering component with excess of .030 inch play measured at one location.

2. Loose steering box.

3. Measured steering wheel lash which exceeds:
2 inches on 16-inch steering wheel.
21/4 inches on 18-inch steering wheel.
2V2 inches on 20-inch steering wheel.
23/4 inches on 22-inch steering wheel.

4. Power steering inoperative, if so equipped.

(i) Wheels and Lugs

1. Tires rims and wheel discs with visible cracks, elongated bolt holes, or any indication of repair by welding. (Hub caps are prohibited).

2. One or more lug nuts loose or missing on five and six lug wheels.

3. Two or more lug nuts loose or missing on eight and ten lug wheels.

(j) Tires

1. Tires with exposed ply or cord due to cuts or wear.

2. Tires with visible bumps, bulges, or knots indicating partial failure or separation of tire structure.

3. Flat tires.

4. Rear tires with tread less than 2/32-inch depth when measured in two adjacent major grooves at three locations spaced equally around the outside of the tire.

5. Front tires with tread less than 4/32-inch depth when measured in two adjacent major grooves at three locations spaced equally around the outside of the tire.

6. Recapped or regrooved tires on the steering axle of any vehicle.

7. Tires worn so as to expose wear bar indicators, contacting the roadway surface in any two major tread groups, at three locations spaced equally around the tire.

(k) Glass

1. Any glass cracked, broken, or shattered to such an extent that splinters are exposed or that an opening is visible.

2. Any crack in excess of 1/4-inch wide or any crack intersected by any other crack.

3. Any damaged area which cannot be covered by a disc 3/4-inch in diameter.

4. Any damaged area within 3 inches of any other damaged area.

5. Air contaminated damage will be at the Inspector’s discretion.

NOTE: Items b, c, and d do not apply to that area below the top of the steering wheel, a 2-inch border at the top and a 1-inch border on each side of the windshield. Plexiglass shall not be used as a substitute for any glass installed on the vehicle.

6. Safety glass ratings (AS-1, AS-2) shall be verified by a stamp on the glass or certification letter from the vendor.

(l) Body

(Rule 1340-3-3-.06, continued)

1. Damaged, loose, or modified molding, panels, or other parts, which are at student level, and are likely to catch or treat skin or clothing or likely to cause bodily harm.

(m) Interior

1. No fire extinguisher.

2. Fire extinguisher not fully charged.

3. No first aid kit.

4. First aid kit less than 113 full.

5. Flooring so deteriorated so as to fail to support any occupant of the vehicle or which might cause the occupant to trip and/or fall.

6. Speedometer not working properly.

7. Air gauge or vacuum gauge not present or working properly. (These gauges are required and must be functional in order to perform testing).

8. Horn inoperative, missing, or unable to locate the horn button. Horn button must be visible and readily accessible to the driver.

9. Horn not audible for 200 feet to the front.

(n) Lights/Exterior

1. Eight-light system that fails to meet any one phase of the inspection criteria as outlined in the inspection procedure.

2. A stop light fails.

3. A tail light out.

4. Any combination of signal lights out.

5. Headlights inoperable.

6. Low beam headlights out.

(o) Windshield Wipers

1. Windshield wiper mechanism failing to operate.

2. Any wiper blade missing.

(p) Suspension Components

1. Wheel bearings - any movement is prohibited.

(Rule 1340-3-3-.06, continued)

2. King pin and/or ball joints - excess of 1/4-inch play, measured at outer circumference of the tire. Ball joints - any movement is prohibited.

3. Springs - broken, front or rear.

4. Broken or loose spring handers.

5. Spring(s) misaligned beyond a straight line extending front and rear, when checked using a straight edge along the outside edge of the U-bolts.

6. Broken center bolts on springs.

7. Broken or loose U-bolts that allow movement or shifting of springs.

8. Cracked or broken cross members or frame rails.

(q) Seats

1. Broken or unsecured seat frames.

2. Torn seats exposing metal spring(s), etc.

(r) Fuel System

1. Fuel leaks that result in pooling or dripping of fuel from lines or tank(s).

2. Inadequate or missing fuel tank cap.

3. Loose or inadequately secured fuel tank(s).

4. Fuel lines must meet O.E.M. or S.A.E. Standards.

(s) Drive Line Loops

1. Any missing, cracked, or broken loops.

(t) Emergency Exits

1. Emergency exits that cannot be opened:

Stuck in the closed position.

Fastened shut by a strap, band, padlock, or other device, either inside or out, in such a manner that would prohibit the door from being opened.

Emergency door opens accidentally or too easily (indicating the door latch is loose).

NOTE: The inspector must be able to open the door using his non-dominant hand.

2. Buzzer for visual exit warning device inoperative.

3. Presence of ignition bypass in vandal lock system.

(Rule 1340-3-3-.06, continued)

4. Inoperative vandal lock system that would permit the vehicle to be started with any emergency exit or door locked.

(u) Engine Compartment

1. Drive belts missing, chafed, cracked, or frayed.

Power steering unit

Air compressor

2. Wiring bare, shorted, hot, or sparking.

3. Broken or missing motor mounts or motor mount bolts.

(v) Other Unsafe Conditions

1. Should the School Bus Inspector identify any other condition or conditions not listed above, but in his/her judgment which renders the bus to be unsafe for the transportation of students, the bus shall be placed out-of-service. In the event a bus is placed out-of-service for reasons as described above, the Inspector shall secure approval for such action from the Supervisor of Pupil Transportation Safety.

***Authority:*** *T.C.A. §§49-6-2102, 49-6-2109, and 4-4-102; Executive Order 45 (February 11, 1983).* ***Administrative History:*** *Original rule filed July 20, 1989; effective October 29, 1989.*

**1340-3-3-.07 SCHOOL BUS DRIVERS AND TRAINING.**

(1) DRIVER TRAINING PROGRAMS

(a) All drivers having Code 27 privileges to operate school buses will be required to attend and satisfactorily complete all state sponsored training programs pursuant to T.C.A. §49-6-2102 in order to keep the endorsement class license, unless such school district as a whole wishes to be considered for a state training exemption. Training exemptions may be granted when determination that a school district already meets or exceeds minimum safety training requirements for school bus drivers as established by the Department of Safety.

1. Any driver failing to attend state-sponsored or state-authorized exemption training sessions the first year will need attendance exemption from the County Board Administrator or Program Director in writing to the Tennessee Pupil Transportation Division.

(b) Any downgrade licensing action against a school bus operator for failing to meet minimum training requirements to maintain Code 27 operating privileges shall be preceded by notification as established in Section (b) of T.C.A. §55-50-502, permitting request for a hearing before adverse licensing action is initiated.

(c) Code 27 downgrading action will occur at the conclusion of each school year.

1. Downgrading will occur no later than July I of each year.

2. Driver not meeting the requirements stated in Section X, A., will be downgraded.

(Rule 1340-3-3-.07, continued)

3. Driver downgraded to Special Chauffeur may reapply for Code 27 operating privileges upon satisfactorily completing the required safety training as mandated for all other Tennessee School Bus Drivers.

(d) NOTE: Drivers of School buses utilized for "school activity" purposes shall possess a Special Chauffeur's License with a Code 27 endorsement.

1. School Activity purposes related to field trips, ball trips, band camps and other non-regular route use that is sanctioned by the board of education on either board-owned, contractor-owned or school-owned equipment.

2. All other adverse actions against Code 27 privileges shall be governed by provisions of T.C.A. §55-50-502.

***Authority:*** *T.C.A. §§49-6-2102 and 4-4-102; Executive Order 45 (February 11, 1983).* ***Administrative History:*** *Original rule filed July 20, 1989; effective October 29, 1989.*